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ABSTRACT

This study compared male and female university teachers' sense of teaching efficacy and their belief in their ability to effect student change. A total of 30 university teachers (15 men and 15 women) from Eastern New Mexico University completed a self-efficacy quiz. The participants' mean years of total teaching were 12.2. One-way analysis of variance showed no significant differences between male and female university teachers in the three factors of teacher's sense of teaching efficacy, high personal teaching efficacy, and low personal teaching effitacy. However, results provided some evidence that teachers' belief in their ability to effect student change when considering external factors is slightly weaker in male than female teachers. Furthermore, the results indicated that the male university teachers believed their ability to effect student change is limited by external factors such as family background and student characteristics. An appendix contains a copy of the self-efficacy quiz and one table of data. Contains seven references. (Author/JB)

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RUNNING HEAD: Gender Comparison of Efficacy

ED 384 288

Gender Comparison of Teachers' Sense of Efficacy

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Abstract

The purpose of this study was to compare teachers' sense of efficacy between male and female university teachers. An analysis of teachers' sense of teaching efficacy, teachers' belief in ability to effect student change when considering external factors, high personal teaching efficacy, and low personal teaching efficacy was explored. The results provide some evidence that teacher's belief in their ability to effect student change when considering external factors is slightly weaker in males than females. Male university teachers' indicate that ability to effect student change is limited by external factors, such as, family background or student characteristics.

Gender Comparison of Teacher's Sense of Efficacy

Teachers' gender may be an important determinant of teachers' sense of efficacy. Garrett (1977) compared the perceptions of 373 male and female teachers. He found that female teachers were more likely than male teachers to attribute successful teaching to teacher-controlled activities. Male teachers were more likely than female teachers to attribute teaching success to the students' family socioeconomic level. Male teachers also put more emphasis on teaching students who are more academically able.

Bandura (1977, 1982) hypothesizes that through life experiences, people develop a generalized expectancy about action-outcome contingencies, as well as more specific belief in their own self-efficacy. The general outcome expectancy is a belief that behavior will lead to desirable outcomes, whereas self-efficacy is a belief that one has the requisite skills to bring about the outcome.

Ashton and Webb (1986) applied the concept to teaching, defining teachers' sense of efficacy as a teachers' situation-specific expectation that they can help students learn and as a means of differentiating more effective from less effective teachers, especially in terms of student accomplishment. It is further defined as having two dimensions: (a) teaching efficacy which consists of beliefs regarding the extent to which teachers in general can motivate students and (b) personal efficacy, the teacher's beliefs about his or her personal ability to influence student performance.

DiBella-McCarthy, McDaniel, and Miller (1995) constructed a self-efficacy quiz (Appendix) as a self-reflective tool to focus teacher attention on self-efficacy in teaching. The purpose of the present study was to compare teachers' sense of efficacy between males and females.

Method

Participants

A total of 30 volunteer university teachers (15 men and 15 women) from Eastern New Mexico University were administered the self-efficacy quiz. The mean years of total teaching was 12.2. The highest degree held by the 30 teachers was, doctorate - 24, masters - 3, and bachelor - 3. All of the participants were offered written feedback on the results of their own self-efficacy quiz as well as the findings of the present study.

Materials

The self-efficacy quiz constructed by DiBella-McCarthy, et al (1995) was utilized in the present study to estimate teachers' sense of efficacy (Appendix). The quiz required teachers to indicate the extent of agreement, or disagreement with each of 32 statements. Teaching efficacy was interpreted by eight statements which examined teachers' sense of teaching efficacy, and eight statements that indicated teachers' belief in ability to effect student change when considering external factors. Personal teaching efficacy was interpreted by eight statements which predicted high personal teaching efficacy, and eight statements that predicted low personal teaching efficacy.

Interpreting the Scores. A score of 25 or above in the teachers' sense of teaching efficacy indicates that the teacher's sense of teaching efficacy is strong and healthy. The teacher holds a view similar to Bloom (1981, p. 39), "what any person in the world can learn, almost all persons

can learn if provided with appropriate prior and current conditions of learning." The teacher believes in the students and their ability to learn despite their backgrounds, gender, or disabilities. The teacher is confident that a student from a dysfunctional family can be as successful as a student from healthy surroundings if provided with proper instruction.

A score of 20 or higher in teachers' belief in ability to effect change when considering external factors indicates that the teachers' belief in ability to effect change is limited by external factors. The teacher may feel that contributing variables such as family background or student characteristics are beyond control and therefore interfere with the ability to teach. If students achieve success, the teacher often attributes it to something other than teaching, such as improvement in the home situation. However, the teachers' self-esteem is not lacking. Also, the teacher probably feels that no other teacher would be able to do a better job.

A score above 25 in the high personal teaching efficacy factor means that the teacher feels confident in their teaching and the ability to make a difference with the students. The teacher feels knowledgeable about the subject and has positive relationships with the students. The teacher puts forth the effort to overcome negative home, community, or student factors because a difference can be made in the lives of students, and their learning proves it.

A score above 20 in the low personal teaching efficacy factor means that the teacher probably has low personal teaching efficacy. There is a lack of self-confidence about competence as a teacher and the ability to overcome student disabilities or home and community disadvantages. An incongruence may exist between the teachers' current level of performance as a teacher, and the teachers' ideal.

Clinical Measures

All subjects were asked to participate in the same manner via a human consent form.

Experimental Measures

The four columns, A, B, C, and D as seen on the original self-efficacy quiz, developed by DiBella-McCarthy, et al (1995), were replaced with just a single column for responses so that the participants could not correlate quiz statements to categories. The university teachers also completed a biographical information sheet.

Procedure

All subjects were assured of anonymity and were asked during office hours to complete the self-efficacy quiz. Most participants completed the quiz within ten minutes.

Design and Analysis

A one-way analysis of variance (ANOVA) between males and females in both factors of teaching efficacy and both factors of personal teaching efficacy was calculated using Statistical Analysis Software (SAS).

Results

Table I contains the self-efficacy quiz score means and standard deviations. Using $p < .05$, the one-way ANOVA results comparing males and females were as follows: (1) Teaching Efficacy - teachers' sense of teaching efficacy, $F(1, 28) = 1.74$, $p < 0.20$, teachers' belief in ability to effect student change while considering external factors, $F(1, 28) = 4.85$, $p < 0.04$, (2) Personal Teaching Efficacy - high personal teaching efficacy, $F(1, 28) = 0.58$, $p < 0.45$, low personal teaching efficacy, $F(1, 28) = 0.24$, $p < 0.62$.

Insert Table I about here

Discussion

The one-way ANOVA results show no significant differences between male and female university teachers in the three factors of teachers' sense of teaching efficacy, high personal teaching efficacy, and low personal teaching efficacy. However, the results provide some evidence that teachers' belief in ability to effect student change when considering external factors is slightly weaker in male versus female university teachers. Furthermore, the results indicate that male university teachers believe their ability to effect student change is limited by external factors such as family background and student characteristics. This finding agrees with the results from the study by Garrett (1977).

The results from this study and the Garrett (1977) study contradict an often cited study conducted by Feather (1969). In a study of whether teachers attributed success and failures to external or internal factors, results indicated that the only significant effect was that due to sex. Females were more likely to attribute their success or failure to good or bad luck (external factors) than were males.

One of the concerns in the experiment was the low number of self-efficacy quizzes completed by the university teachers. Although, there are about 150 full-time teachers at Eastern New Mexico University, it proved difficult to merely acquire the 30 participants used in the study. It may have been that the university teachers did not feel that the quiz applied to them and was better suited for high school and elementary school teachers.

Another confounding variable was the relativity of external factors to university teachers. It appears that most university teachers believe that teaching efficacy and personal teaching efficacy are important factors in teachers' sense of efficacy, but do not believe that external factors are

applicable at the collegiate level of instruction. This was evident by the numerous ratings of "three" (neutral) on quiz statements relating to the factor of teachers' belief in ability to effect student change when considering external factors.

Future research on gender differences in teaching efficacy of university teachers should address the issue of applicability of external factors, such as, the socio-economic class of the family. Additionally, a much larger sample size should be obtained if possible.

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Appendix

SELF-EFFICACY QUIZ

Consider each statement below and indicate the extent to which you agree or disagree with it. There are five possible ratings:

(1) Strongly disagree (2) Disagree (3) Neutral (4) Agree (5) Strongly agree

In the space next to the statement, please right the number that best describes your opinion or your self-perception.

1. I am confident in my abilities as a teacher. ___
2. With the right techniques and materials, all students can learn. ___
3. When a colleague boasts about student progress I feel inadequate. ___
4. New research in education is just "old wine in new bottles." ___
5. Some students are beyond my reach. ___
6. The socioeconomic status of a student is not a critical variable of effective teaching. ___
7. I am adept at behavior management and handling discipline. ___
8. Even the worst home situations should not interfere with a teacher's ability to teach students. ___
9. My enthusiasm for teaching makes me an effective teacher. ___
10. In a given class, students from low-income backgrounds will probably not do as well academically as students from upper or middle class homes. ___
11. There is little I can do to prevent the failure of my low achieving students. ___
12. Students' disabilities are challenges, not obstacles, that motivate teachers to do a better job. ___
13. I am making a difference in the lives of my students. ___
14. There is little I can do to influence change in a student from a dysfunctional

or broken home. ___

15. If students did not act out in class, I could do what I am trained to do--teach. ___

16. Sometimes the out-of-school problems of students overwhelm teachers; it is no wonder teachers cannot teach. ___

17. I have never met a student I could not teach. ___

18. A teacher is only one person; only a miracle can help some kids. ___

19. If teachers provide a positive role model for students, even those experiencing negative influences at home can succeed. ___

20. My students' progress is a reflection of my teaching. ___

21. Teachers have little effect on student motivation to learn. ___

22. My students know that I care about them, and they try hard to meet my expectations. ___

23. Effective teachers are powerful influences in the lives of their students. ___

24. Most of my colleagues seem to be more innovative and resourceful than I am. ___

25. Powerful teaching can overcome many negative home environmental factors. ___

26. There is little I can do to help a student who just doesn't care about learning. ___

27. Good teachers continually search for new ideas for research and inservice training to enhance teaching. ___

28. I am confident in my subject matter and can answer students' questions in depth. ___

29. Teacher's influence on student achievement is limited compared to the influence of the home environment. ___

30. In some subjects I feel I am just a page or two ahead of my students. ___

31. Certain disabilities of my students interfere with my ability to teach them. ___

32. When my students fail to make the expected progress, I get discouraged and begin to doubt my skills as a teacher. ___

Table I

Self-Efficacy Quiz Score Means and Standard Deviations

	Male (n =15)		Female (n = 15)	
Factor	M	SD	M	SD
Teaching Efficacy				
Teachers' sense of teaching efficacy	28.27	5.76	30.67	4.03
Teachers' belief in ability to effect change when considering external factors	22.93	3.95	19.53	4.49
Personal Teaching Efficacy				
High personal teaching efficacy	31.80	4.59	32.87	2.88
Low personal teaching efficacy	19.13	4.53	19.87	3.52